



Georgia's Energy Sector Electricity Market Watch

Public-Private Partnership Law - new opportunity for energy sector projects

Energy sector (excluding oil & gas) is one of the strategically important sectors under newly adopted PPP legislation – which, among others, envisages the possibility of granting long-term guaranteed purchase agreement to the investor. The law on Public-Private partnership was approved by the Parliament of Georgia in May 2018. Later in August 2018, the government of Georgia adopted the rule for PPP projects screening and implementation. These documents define the general framework for PPP projects initiation, partner finding and monitoring.

The project qualifies under PPP legislation if: 1) the value of the project exceeds GEL 5mn and duration is more than 5 years; 2) the risks and investments are fairly shared between the private and public investors; 3) the project is of public interest. Furthermore, for some sectors additional criteria might be added to qualify the project under PPP framework.

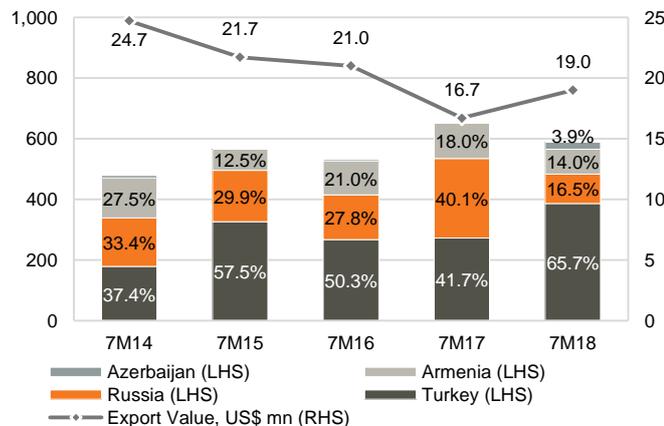
The project initiation and private partner finding process is generally led by special entities, based on transparent and competitive principles. The energy sector has some exemptions from general rules, e.g: for the projects larger than 100MW, the initiation process must include feasibility study conducted by independent company; all energy sector PPP projects should be agreed with the government despite the size of the project; private companies are allowed to initiate the project; the Government has right to allow closed and direct negotiations with only one partner, skipping the public tendering and evaluation procedure.

The export season of 2018 ended with total export of 588.3GWh (-9.9% y/y). The decrease in 7M exports is explained by: 1) last year's high base due to unexpected surplus in hydro generation, 2) disruption of export caused by Enguri's emergency closure in May-2018, 3) low prices on Turkish market, incentivizing companies with TDAs (e.g. Georgian Urban Energy) to sign additional agreements with the GoG and limit export to only May-July period in favor of increased local supply.

Eva Bochorishvili
Head of Research
evabochorishvili@gt.ge
+995 322 401 111 ext.8036

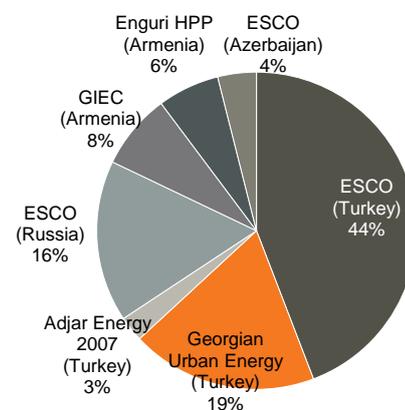
Mariam Chakhvashvili
Analyst
mchakhvashvili@gt.ge
+995 322 401 111 ext.7897

Figure 1: Electricity export, GWh



Source: ESCO, GeoStat

Figure 2: Electricity exporters and export directions, 7M18



Source: ESCO



ESCO was the main exporter in 2018 (64.6% of total exports), selling electricity to Russia and Azerbaijan, also exporting to Turkey in exchange of already occurred or planned imports from Turkey. Other exporters in 2018 were Georgian Urban Energy (to Turkey), GIEC (to Armenia), Enguri HPP (to Armenia) and Adjar Energy 2007 (to Turkey).

Although the volume of exported electricity was down, its total value increased by 13.8% y/y to US\$ 19.0mn, as Russia's share (which pays low price vs other markets) in total exports decreased y/y. The electricity trade deficit stood at US\$ 11.8mn in 7M18 and was down 40.8% y/y as growth in exports partly absorbed imports.

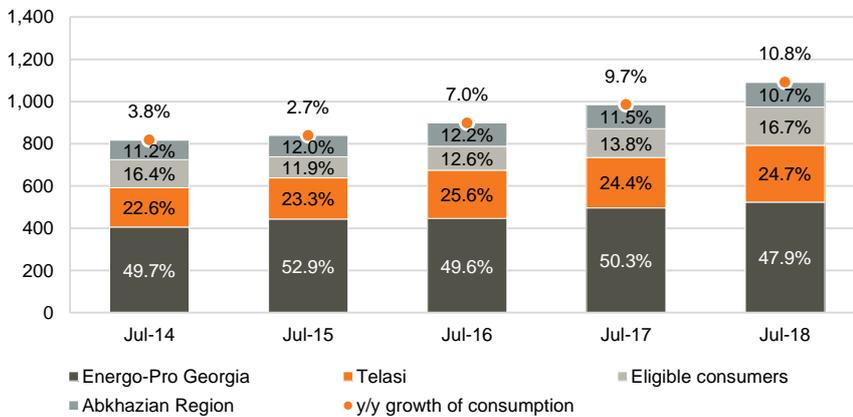
Electricity Consumption, Exports, Generation and Imports - July 2018

Domestic electricity consumption increased 10.8% y/y in July 2018 and 8.8% y/y in 7M18. The eligible consumers and distribution licensees drove this growth.

Eligible consumers' increased their consumption by 33.6% y/y, accounting for 16.7% of total domestic consumption. This growth can be explained by addition of 3 new companies (GFDC Georgia, Geo Servers and Kutaisi Investments) to the group of eligible consumers. This was in line with legal changes effective since May 2018 as their average monthly consumption of electricity was above 15MWh.

Consumption by **distribution licensees** was up by 7.8% y/y in July 2018, as consumption of new commercial subscribers fully compensated the reduced consumption caused by reallocation of 3 above mentioned large companies into different category.

Figure 3: Domestic electricity consumption, GWh



Source: ESCO
Note: Kakheti Energy Distribution was purchased by Energo-Pro Georgia in August, 2017

Electricity exports were down 40.5% y/y and accounted for 10.4% of electricity supplied to the grid in July 2018. A 52.2% out of 132.0MWh total exports were directed to Turkey (-40.5% y/y), while the rest was exported to Russia (33.3% of total exports), Armenia (7.6% of total exports) and Azerbaijan (6.9% of total exports) in July 2018. A 70% of total exports were conducted by ESCO and were directed to Russia, Azerbaijan and Turkey. The private companies, exporting in Jul-18 were GIEC (to Armenia) and Georgian Urban Energy (to Turkey).

Table 1: Demand growth breakdown, Jul-18

Consumer	Growth rate, y/y	Share in consumption
Domestic consumption	+10.8%	100.0%
Abkhazian region	+2.8%	10.7%
Eligible consumers	+33.6%	16.7%
Distribution	+7.8%	72.7%
Energo-Pro Georgia	+5.5%	47.9%
Telasi	+12.5%	24.7%

Source: ESCO



The demand was satisfied by hydro generation in July 2018

Hydro Generation increased slightly (+1.5% y/y) and reached 1.3TWh, supported by good hydrological conditions and commissioning of new HPPs. Meanwhile, the maintenance works on some regulated HPPs dragged the supply.

Enguri/Vardnili generation (+11.2% y/y) satisfied 65.9% of electricity demand in July 2018. In 7M18 generation of Enguri/Vardnili increased 24.8% y/y and reached its record high generation since 2010 (3.2TWh).

Thermal generation and imports accounted for 0.7% of total electricity supply, used only for system’s balancing and stability purposes.

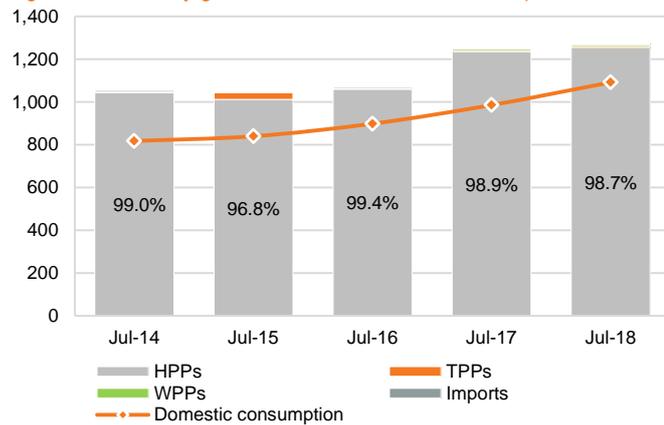
The guaranteed capacity fee was down 9.6% y/y to USc 0.38/kWh in July 2018. The GC fee is relatively low in summer months due to planned maintenance works on most of the TPPs. In July 2018, the TPPs under maintenance were Mtkvari Energy, Block 4 of Tbilisresi and Gardabani CCGT.

Table 2: Supply growth breakdown, Jul-18

Supply source	Growth rate, y/y	Share in supply
Total Supply	+1.7%	100.0%
Imports	+1.6%	0.1%
Domestic generation	+1.7%	99.9%
TPPs	+30.9%	0.6%
WPPs	+9.9%	0.6%
HPPs	+1.5%	98.7%
Enguri and Vardnili	+11.2%	65.9%
Other regulated HPPs	-21.7%	19.5%
Deregulated HPPs	+1.7%	13.3%

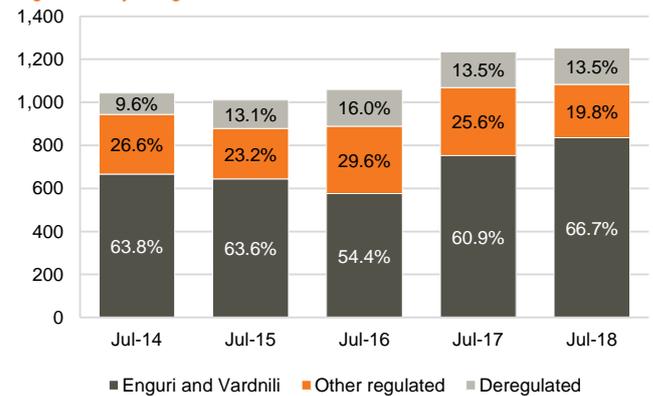
Source: ESCO

Figure 4: Electricity generation and domestic consumption, GWh



Source: ESCO

Figure 5: Hydro generation, GWh



Source: ESCO



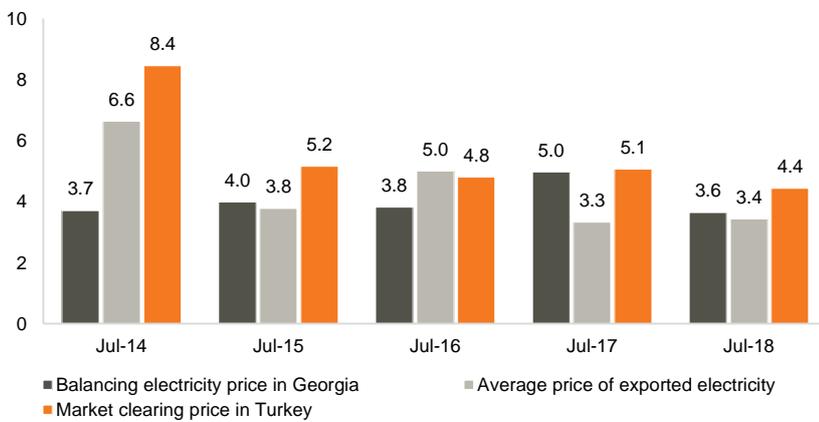
Electricity Prices in Georgia and Turkey - July 2018

Wholesale market prices in Georgia decreased 26.7% y/y to USc 3.6/kWh in July 2018. Only 5.4% of total electricity supplied to the grid in July 2018 was traded through the market operator ESCO, with the rest traded through bilateral contracts.

Average price of Georgia's electricity exports was up 3.1% y/y to USc 3.4/kWh in July 2018.

Turkish electricity prices were up 16.7% y/y in TRY terms, but due to Lira depreciation were down 12.5% y/y in US\$ terms to USc 4.4/kWh.

Figure 6: Electricity prices in Georgia and Turkey, USc/kWh



Source: ESCO, GeoStat, EPIAS
Note: Imports in July are insignificant.



Table 3: Electricity Balance (GWh)

	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	2017	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	7M18
Domestic consumption, total	1,037	918	947	1,032	1,163	11,856	1,168	1,059	1,114	979	961	980	1,091	7,352
% change y/y	14%	16%	7%	7%	0%	7.7%	8%	5%	9%	5%	12%	13%	11%	8.8%
<i>Of which:</i>														
- Abkhazian Region	119	101	136	194	241	2,002	247	216	207	149	100	101	116	1,138
% change y/y	2%	-8%	-4%	-1%	-5%	3.9%	-2%	-7%	1%	-13%	-24%	0%	3%	-5.9%
- Eligible consumers	138	122	121	107	102	1,427	108	104	115	109	180	176	182	974
% change y/y	66%	91%	62%	32%	-17%	18.1%	1%	-8%	-11%	-14%	90%	35%	34%	16.2%
- Distribution Companies	780	695	690	732	819	8,427	812	738	792	721	680	702	793	5,239
% change y/y	10%	13%	4%	6%	4%	7.1%	12%	11%	16%	14%	8%	10%	8%	11.2%
<i>Of which:</i>														
- Energo-Pro Georgia	519	456	457	481	528	5,493	521	476	521	485	466	476	523	3,468
% change y/y	11%	13%	5%	10%	8%	8.1%	17%	16%	19%	16%	11%	12%	5%	13.6%
-Telasi	261	239	233	251	292	2,935	291	262	271	237	215	226	270	1,771
% change y/y	9%	12%	1%	-1%	-2%	5.2%	4%	2%	10%	9%	3%	7%	13%	6.7%
Domestic Generation, total	1,035	821	828	968	1,080	11,531	1,014	934	997	1,064	1,161	1,208	1,268	7,646
% change y/y	8%	3%	-9%	-3%	-9%	-0.4%	6%	15%	35%	30%	6%	6%	2%	12.4%
<i>Of which:</i>														
- HPPs	944	706	583	658	682	9,211	676	594	775	1,019	1,079	1,200	1,253	6,596
% change y/y	6%	10%	-11%	2%	0%	-1.3%	20%	64%	42%	41%	0%	6%	2%	17.0%
- TPPs	83	107	239	304	393	2,233	331	334	215	35	76	3	7	1,002
% change y/y	31%	-32%	-6%	-14%	-21%	-0.1%	-14%	-24%	14%	-59%	NM	171%	31%	-9.5%
- WPPs	8	7	7	5	6	88	7	6	7	9	5	5	8	48
% change y/y	N/A	N/A	N/A	178%	-19%	NM	10%	7%	-21%	0%	-34%	-41%	10%	-11.9%
Imports	73	133	157	110	135	1,497	202	168	161	11	44	6	1	593
% change y/y	597%	449%	832%	766%	302%	212.6%	13%	-33%	-48%	-92%	NM	NM	2%	-33.3%
Exports	32	0	0	1	0	686	-	-	-	62	200	195	132	588
% change y/y	16%	N/A	N/A	N/A	N/A	22.7%	N/A	N/A	N/A	N/A	0%	-15%	-40%	-10%
Net Export/Import	(41)	(133)	(157)	(109)	(135)	(811)	(202)	(168)	(161)	51	156	188	131	(5)
Transit	93	32	15	23	53	254	-	13	-	-	-	-	-	13
% change y/y	-33%	-69%	-89%	-83%	-61%	-70.1%	N/A	-18%	N/A	N/A	N/A	N/A	N/A	-65.5%

Source: ESCO

Note: Energo-pro Georgia includes consumption of Kakheti Energy Distribution before Aug-17



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Address: 79 D. Agmashenebeli Avenue, Tbilisi 0102, Georgia

Tel: + (995) 32 2401 111

Email: research@gt.ge

Head of Research

Eva Bochorishvili | evabochorishvili@gt.ge

Economist

Lasha Kavtaradze | lashakavtaradze@gt.ge

Head of Analytics Unit

Giorgi Iremashvili | giremashvili@gt.ge

Analyst

Mariam Chakhvashvili | mchakhvashvili@gt.ge

Senior Analyst

Bachana Shengelia | bshengelia@gt.ge

Analyst

Ana Nachkebia | ananachkebia@gt.ge

Analyst

Kakhaber Samkurashvili | ksamkurashvili@gt.ge

Analyst

Ioseb Kumsishvili | ikumsishvili@gt.ge